

IN THE SPECIFICATION

Please make the following amendments to the specification:

[0017] **FIG. 1** (PRIOR ART) shows a resistivity imaging tool suspended in a borehole;
FIG. 2A (PRIOR ART) is a mechanical schematic view of the imaging tool of **Fig. 1**;
FIG. 2BA (PRIOR ART) is a detail view of an electrode pad for the tool of **Figs. 1, 2A**;
FIG. 3 (PRIOR ART) is a pictorial view of a composite imaging log obtained by merging the resistivity image data shown in acoustic image data;
FIGS. 4A and 4B illustrate the principal steps of the process of one embodiment of the invention.
FIG. 5A is a schematic illustration of the distribution of water and hydrocarbons in a porous reservoir.
FIG. 5B shows the relationship between water saturation and the volume of coarse grain sand in a porous rock.
FIG. 6A is a plot of resistivity index as a function of water saturation for a bimodal sand reservoir.
FIG. 6B shows the effect of water saturation on the resistivity anisotropy of a bimodal sand.
FIG. 7A shows possible solutions for the inversion of measured resistivity of a bimodal sand reservoir.
FIG. 7B shows the dependency of spherical permeability of a bimodal sand reservoir on the volume fraction of the coarse grained component.